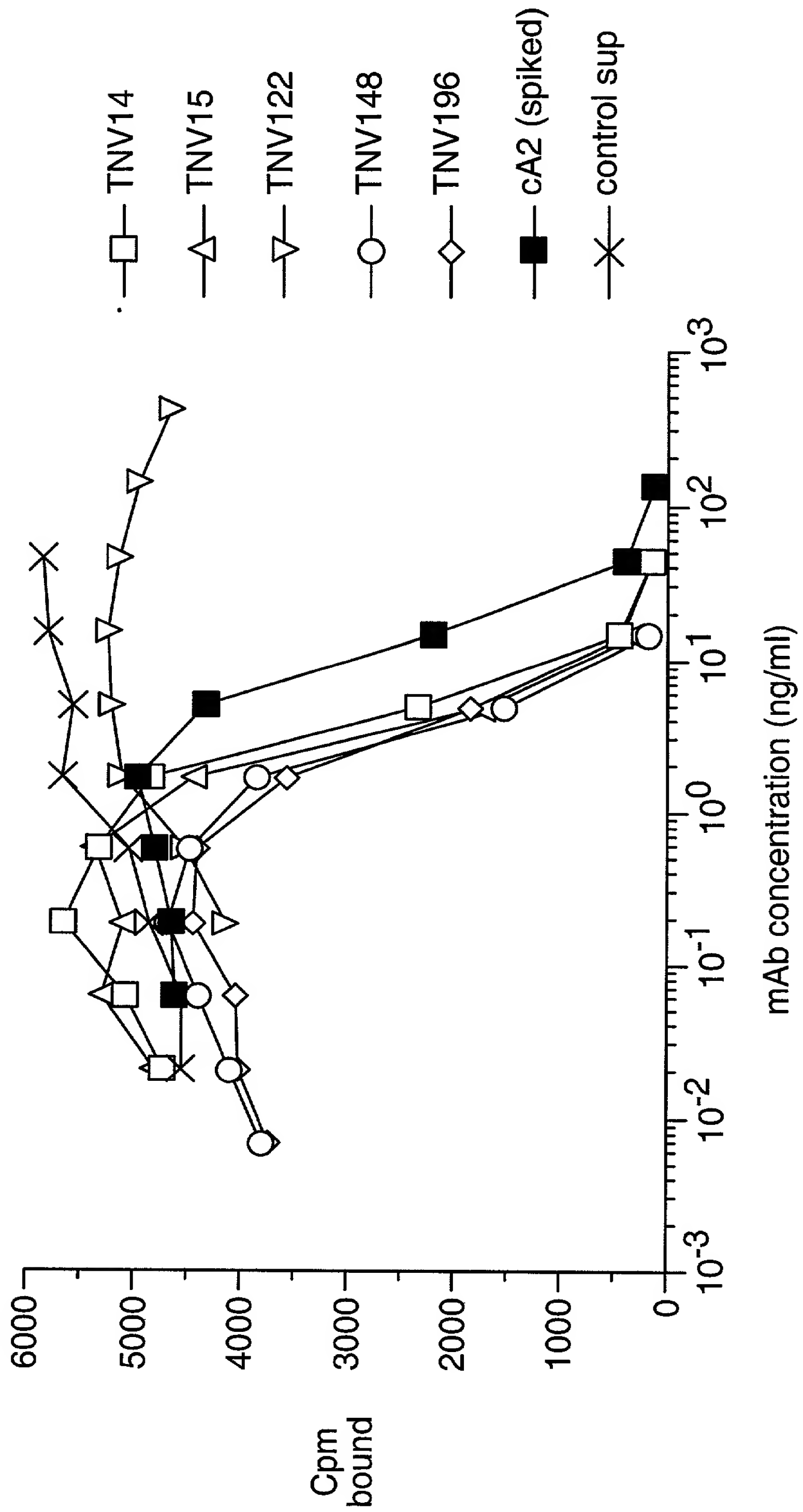


FIG. 1



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FIG. 2A

TNVs ATGGGGTTTGGGCTGAGCTGGGTTTTCCTCGTTGCTCTTTTAAGA

germline Q V Q L V E S G G G V
CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTG
TNVs GGTGTCCAGTGT.....
TNV148 (B) GGTGTCCAGTGT.....A.....

germline V Q P G R S L R L S C A A S G
GTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGA
TNVs

germline F T F S S Y A M H W V R Q A P
TTCACCTTCAGTAGCTATGCTATGCACTGGGTCCGCCAGGCTCCA
TNV14, 15
TNV148 (B)T.....
TNV196C.....

germline G K G L E W V A V I S Y D G S
GGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGATGGAAGC
TNV14A....C.T.....T
TNV15T.....T.....T
TNV148 (B)C.....T....G.....
TNV196T.....

germline N K Y Y A D S V K G R F T I S
AATAAATACTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCC
TNV14 .GC...A.G.....G.....A.....
TNV15 ..C...A.G.....C.....
TNV148 (B)A.G.....
TNV196A.G.C.....G.....

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FIG. 2B

germline R D N S K N T L Y L Q M N S L
AGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTG
TNV14
TNV15G.....
TNV148C.....
TNV148B
TNV196T.....

germline R A E D T A V Y Y C A R
AGAGCTGAGGACACGGCTGTGTATTACTGTGCGAGA
TNV14,15GATCGAGGT
TNV148(B)A
TNV196T.....

germline Y Y Y Y Y G M D V W
TACTACTACTACTACGGTATGGACGTCTGG
TNV14
ATATCAGCAGGTGGAA.....
TNV15
G.C.....A.T..T.....
TNV148(B) ...G.....A.....
TNV196 ..TGG.....A.....

germline G Q G T T V T V S S
GGGCAAGGGACCACGGTCACCGTCTCCTCAG
TNV14 ..C.....
TNV15 ..C.....
TNV148(B) ..C.....
TNV196 ..C..G.....

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FIG. 3

TNVs ATGGAAGCCCCAGCTCAGCTTCTCTTCCTCCTGCTACTCTGGCTC

germline E I V L T Q S P A T
TNVs GAAATTGTGTTGACACAGTCTCCAGCCACC
CCAGATAACCACCGGA.....

germline L S L S P G E R A T L S C R A
TNVs CTGTCTTTGTCTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCC
.....

germline S Q S V S S Y L A W Y Q Q K P
TNV14,15 AGTCAGAGTGTTAGCAGCTACTTAGCCTGGTACCAACAGAAACCT
TNV148,196
.....TA.....

germline G Q A P R L L I Y D A S N R A
TNVs GGCCAGGCTCCCAGGCTCCTCATCTATGATGCATCCAACAGGGCC
.....

germline T G I P A R F S G S G S G T D
TNVs ACTGGCATCCCAGCCAGGTTTCAGTGGCAGTGGGTCTGGGACAGAC
.....

germline F T L T I S S L E P E D F A V
TNVs TTTACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTT
.....

Germline Y Y C Q Q R S N W P P F T F G
TNVs TATTACTGTCAGCAGCGTAGCAACTGGCCTCCATTCACTTTCGGC
.....

germline P G T K V D I K R
TNVs CCTGGGACCAAAGTGGATATCAAACGT
.....

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FIG. 4

	germline	<u>MGFGLSWVFLVALLRGVQC</u>	signal
TNVs		
germline	QVQLVESGGGVVQPGRSLRLSCAASGFTFS		FR1
TNVs	.....	
TNV148 (B)	.....I..		
germline	SYAMH		CDR1
TNVs	.....	
germline	WVRQAPGKGLEWVA	FR2	
TNVs	.....	
TNV148 (B)	.....N.....		
germline	VISYDGSNKYYADSVKG		CDR2
TNV14	I.L....S.K.....D		
TNV15	F.L....K.....		
TNV148 (B)	FM.....K.....		
TNV196	F.....KS.....		
germline	RFTISRDN SKNTLYLQMNSLRAEDTAVYYCAR	FR3	
TNV14	.....	
TNV15	.....A.....		
TNV148	.....P.....		
TNV148B	.....	
TNV196	...V.....F.....F....		
germline	-----Y Y Y Y Y G M D V		CDR3
TNV14	DRGISAGGN.....		
TNV15	...V....N.....		
TNV148 (B)A...N.....		
TNV196G...N.....		
germline	WGQGTTVTVSS	J6	
TNVs		

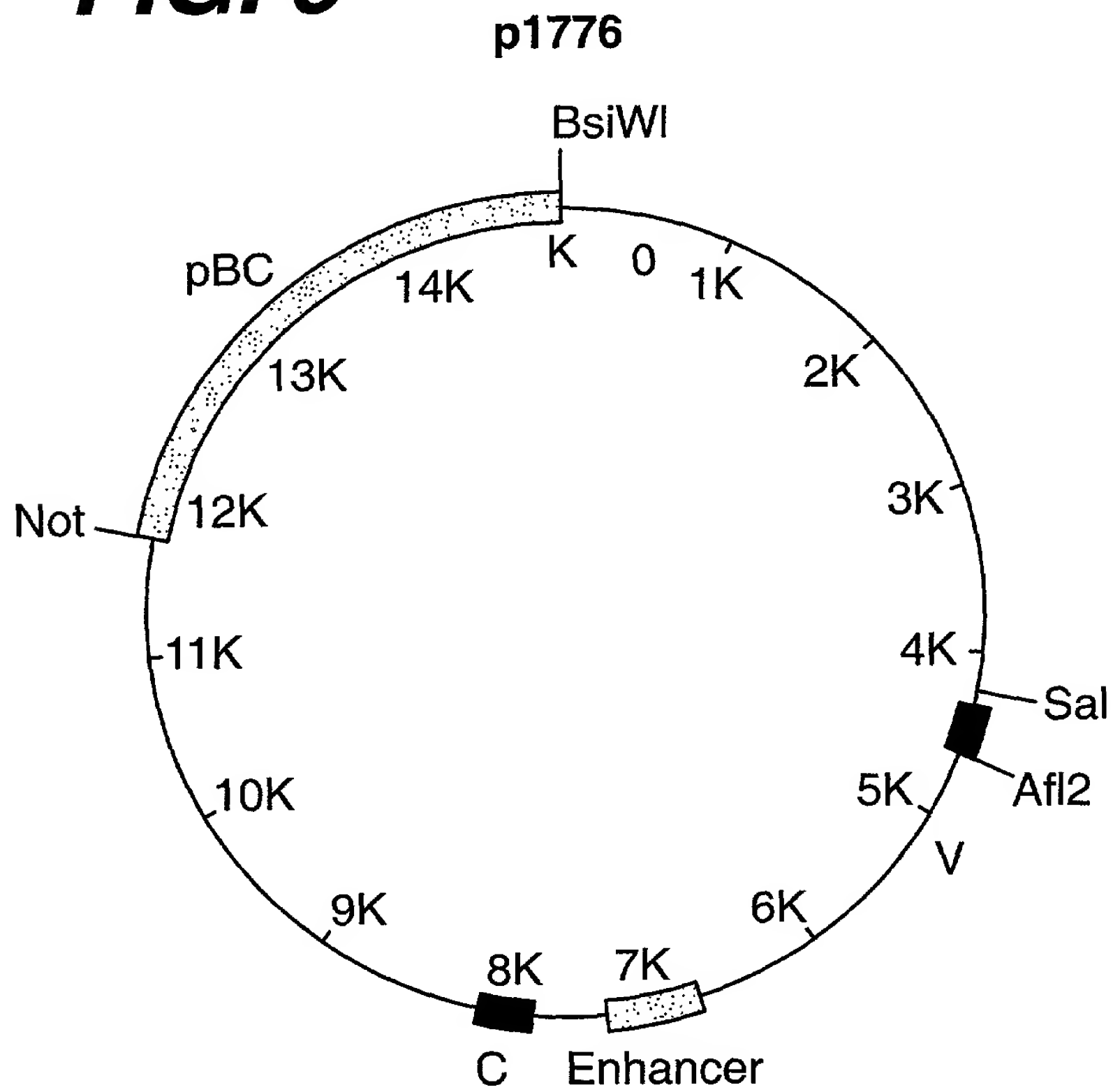
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FIG. 5

TNVs	MEAPAQLLFLLLLWL PDTTG	signal
germline	EIVLTQSPATLSLSPGERATLSC	FR1
TNVs	.....
germline	RASQSVSSYLA	CDR1
TNV14	.....
TNV15	.....
TNV148 (B)	.....Y.....	
TNV196	.....Y.....	
germline	WYQQKPGQAPRLLIY	FR2
TNVs	.....
germline	DASNRAT	CDR2
TNVs	.....
germline	GIPARFSGSGSGTDFTLTISSLEPEDFAVYYC	FR3
TNVs	
germline	QQRSNWPPFT	CDR3
TNVs	
germline	FGPGTKVDIK	J3
TNVs	

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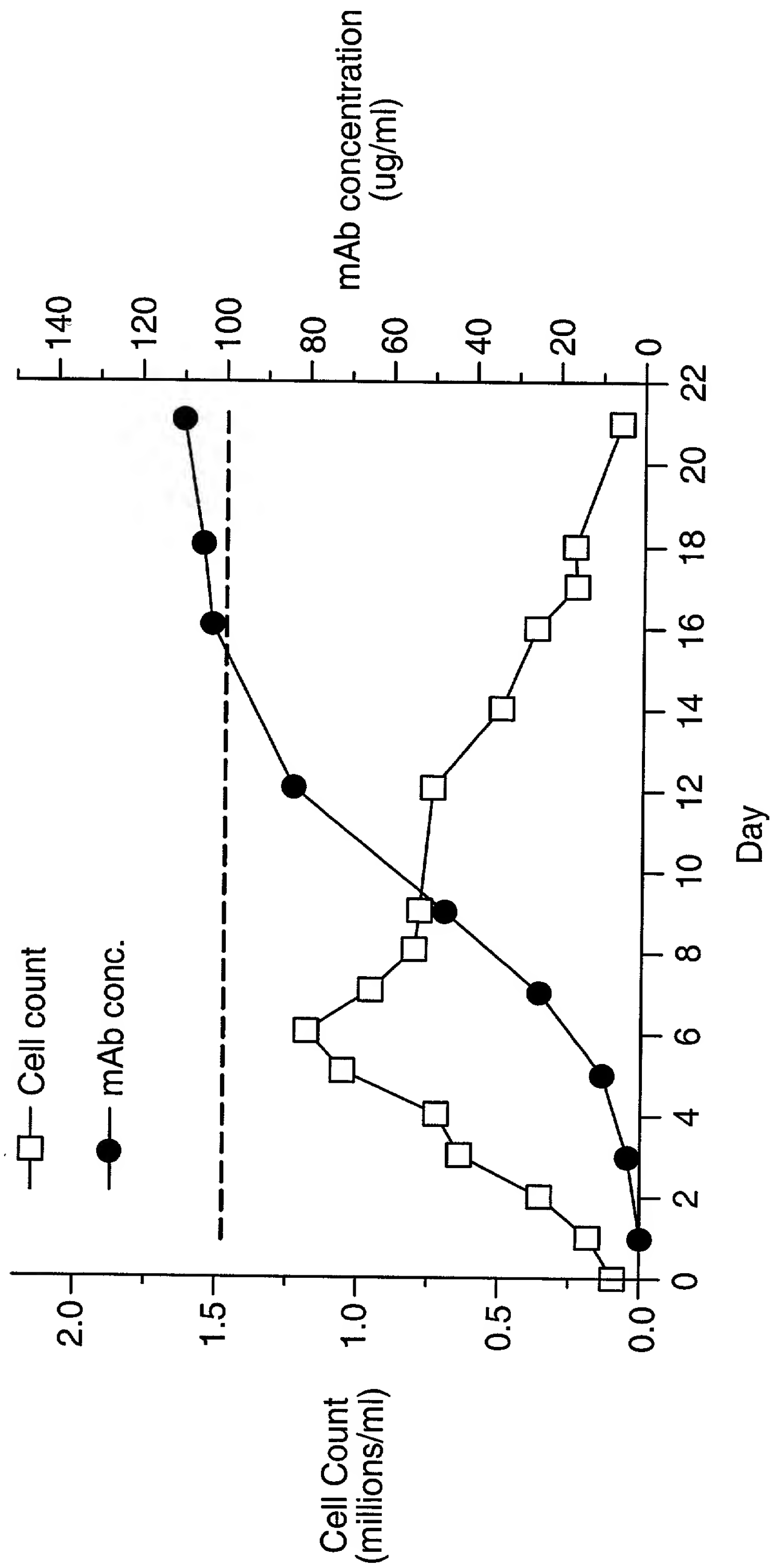
FIG. 6



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FIG. 7A

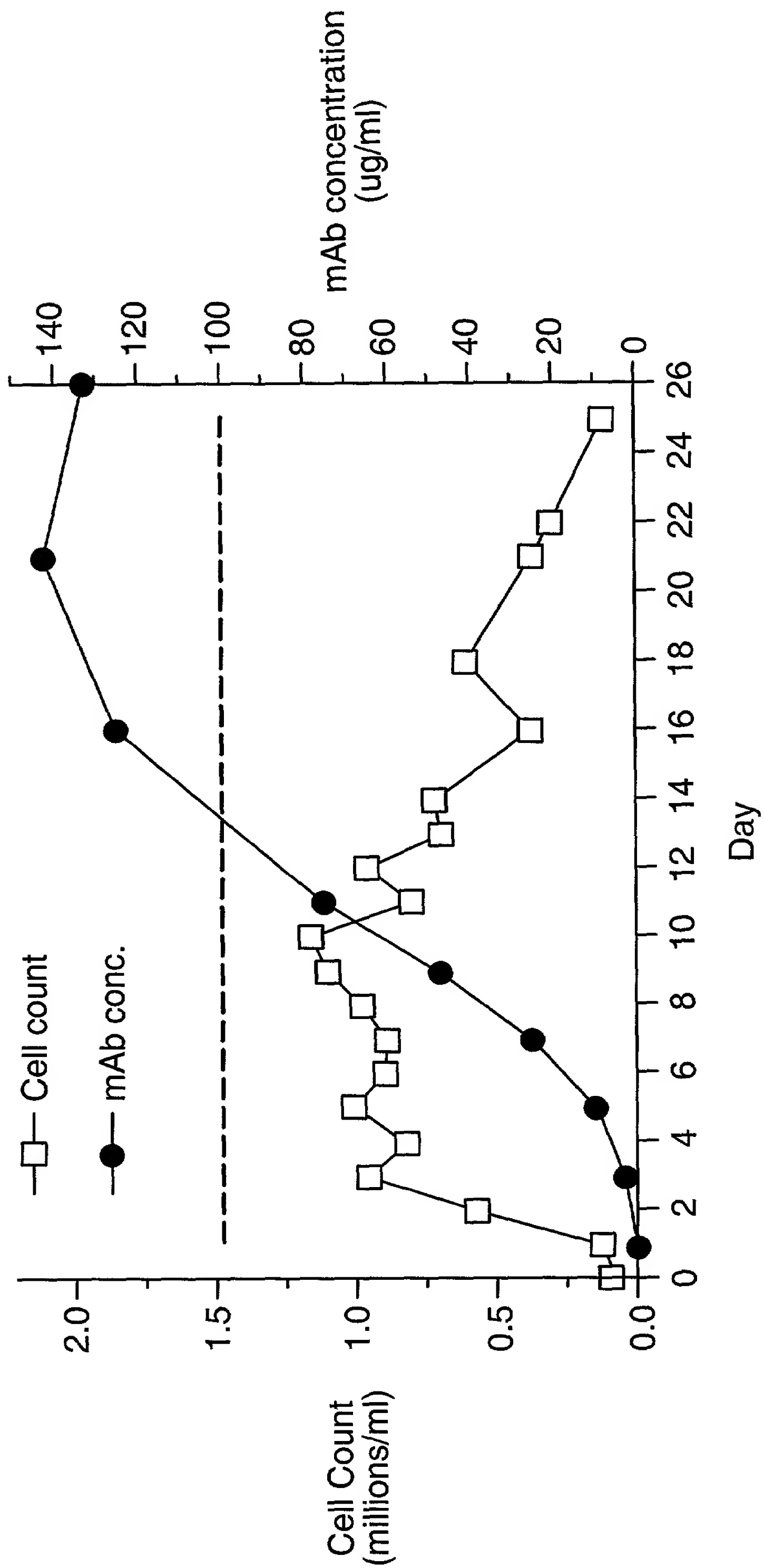
2.320-17-36 = C466A (653)



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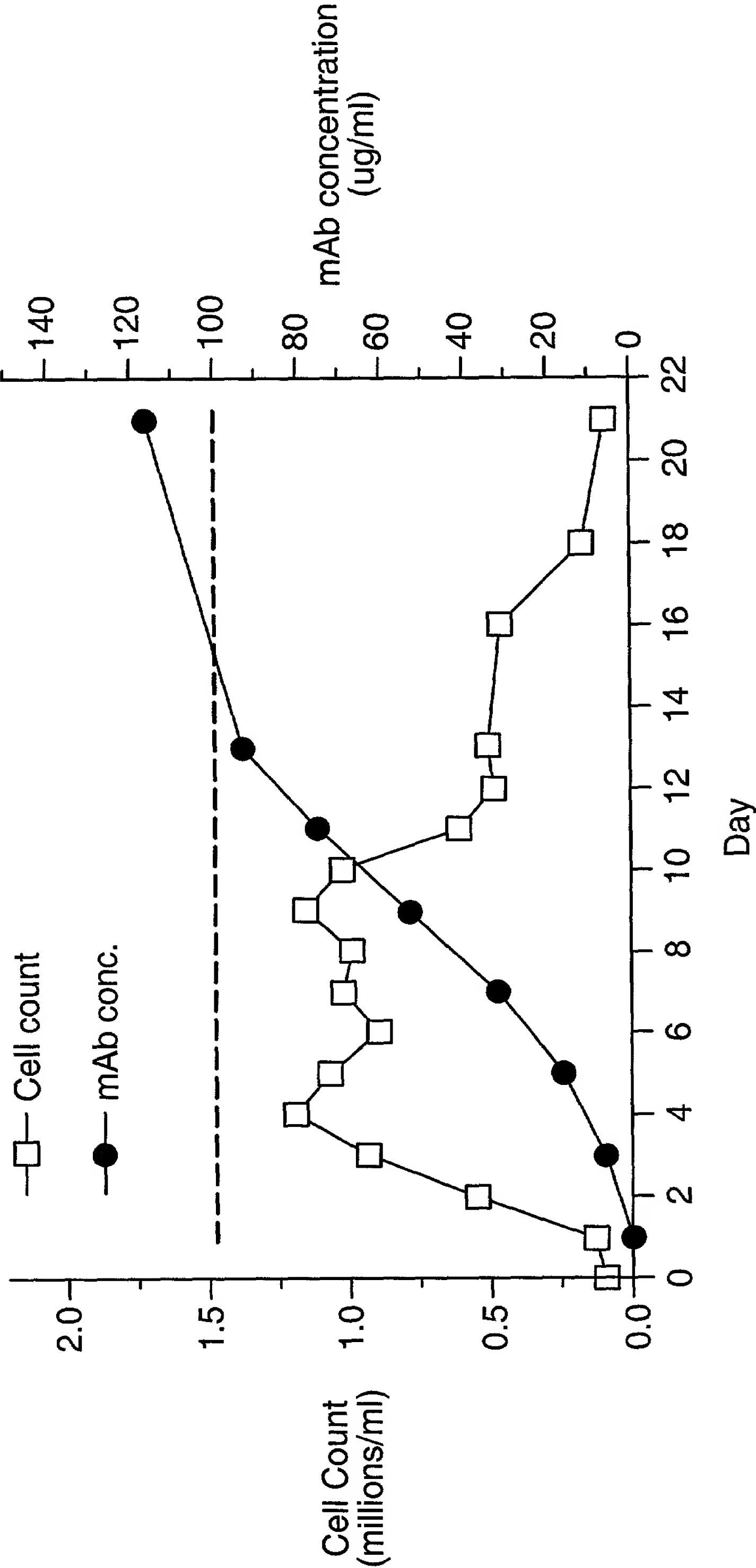
FIG. 7B

2.230-20-111 = C466B (653)



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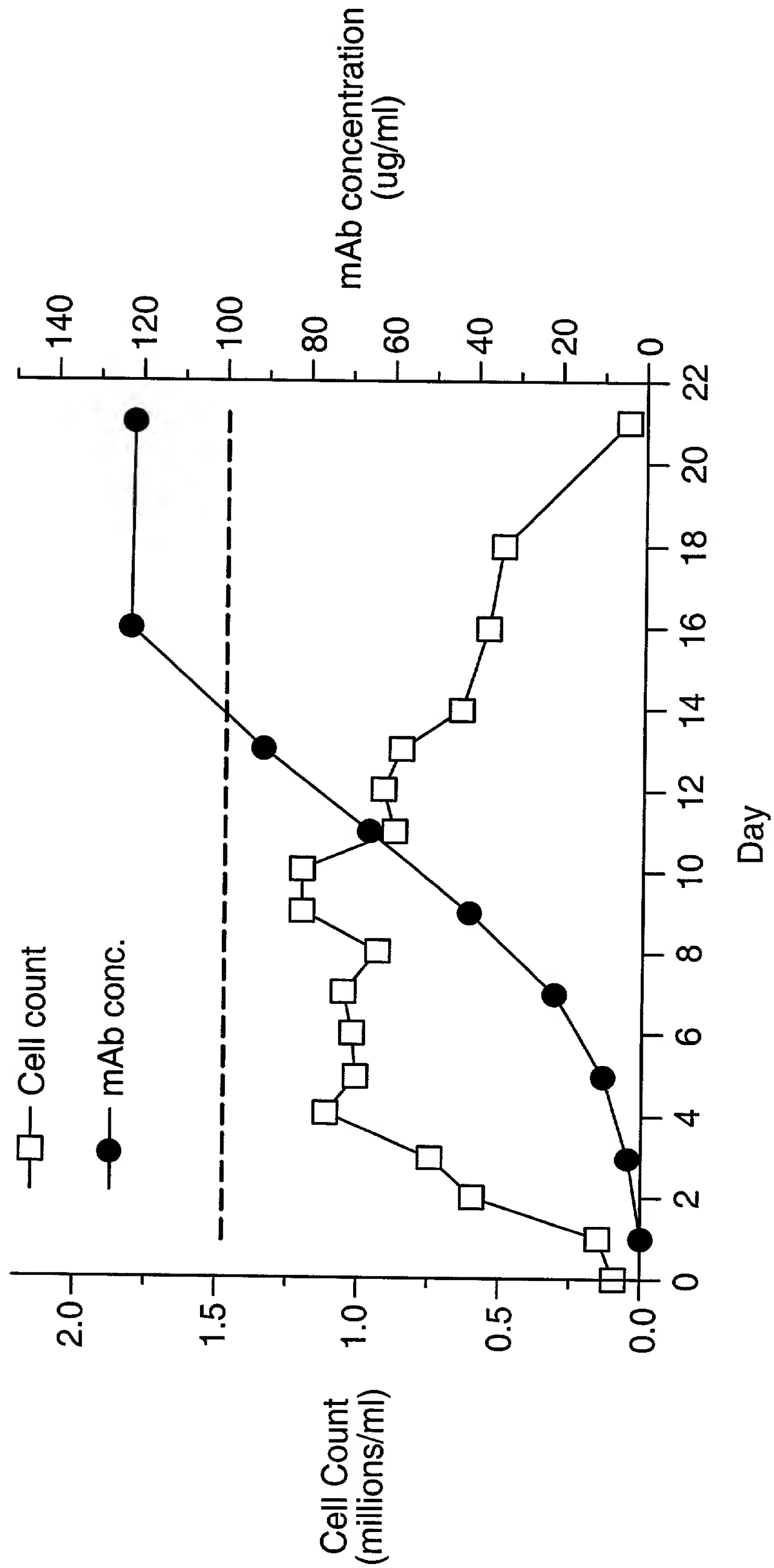
FIG. 7C
2.230-17-4 = C466C (653)



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FIG. 7D

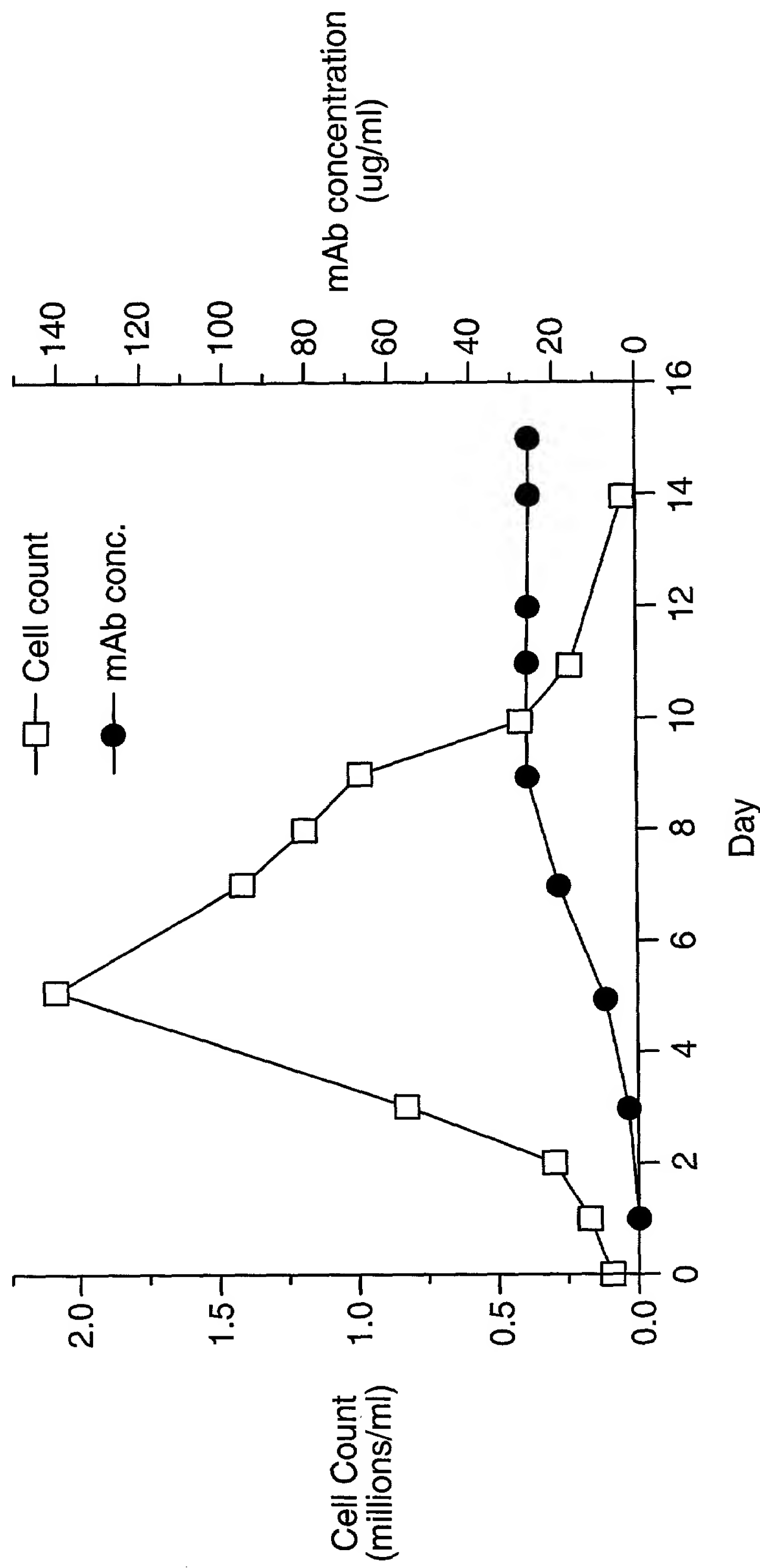
2.320-20-99 = C466D (653)



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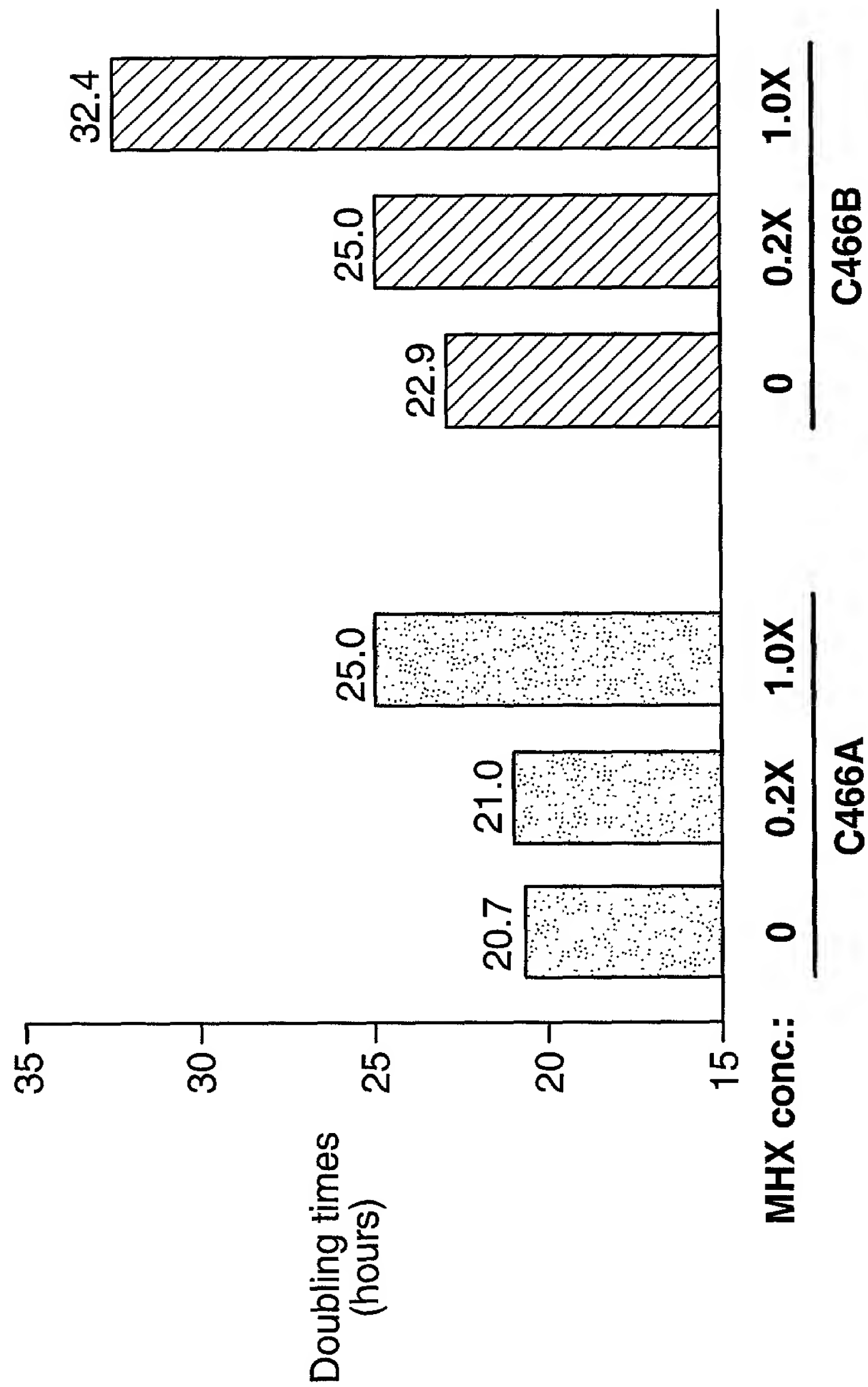
FIG. 7E

1.73-12-122 = C467A (SP2/0)



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FIG. 8



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FIG. 9A

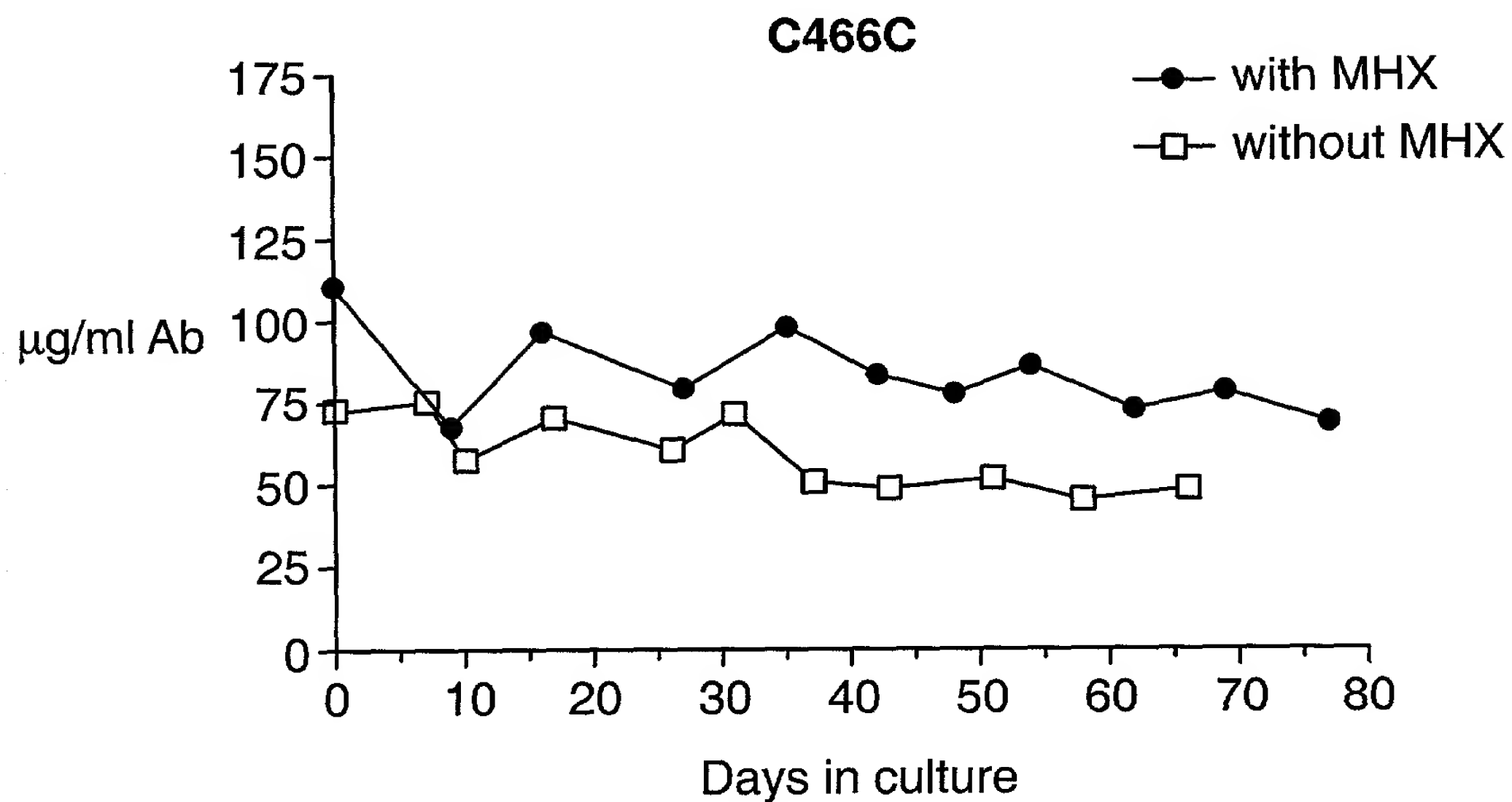


FIG. 9B

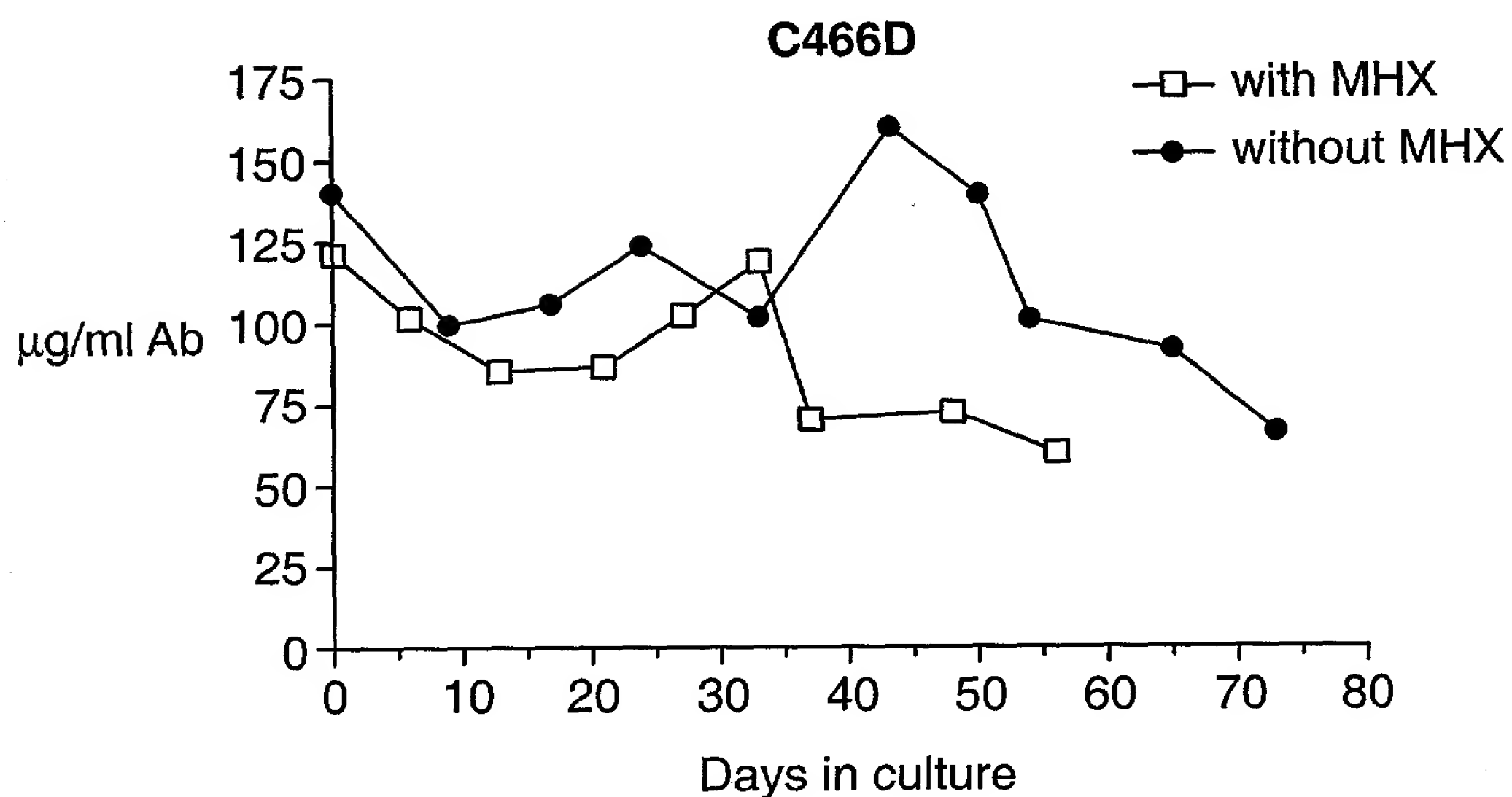


FIG. 10

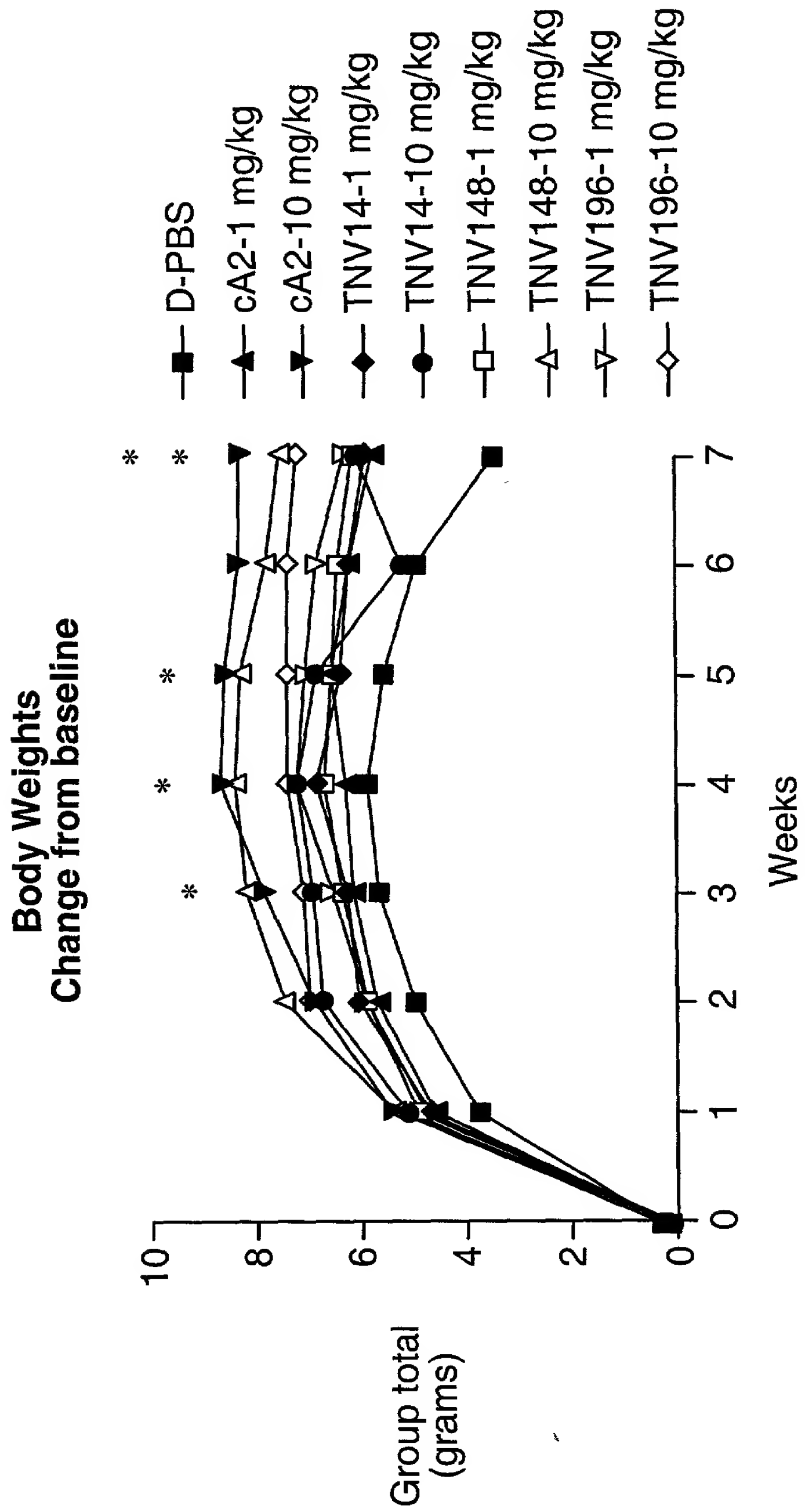
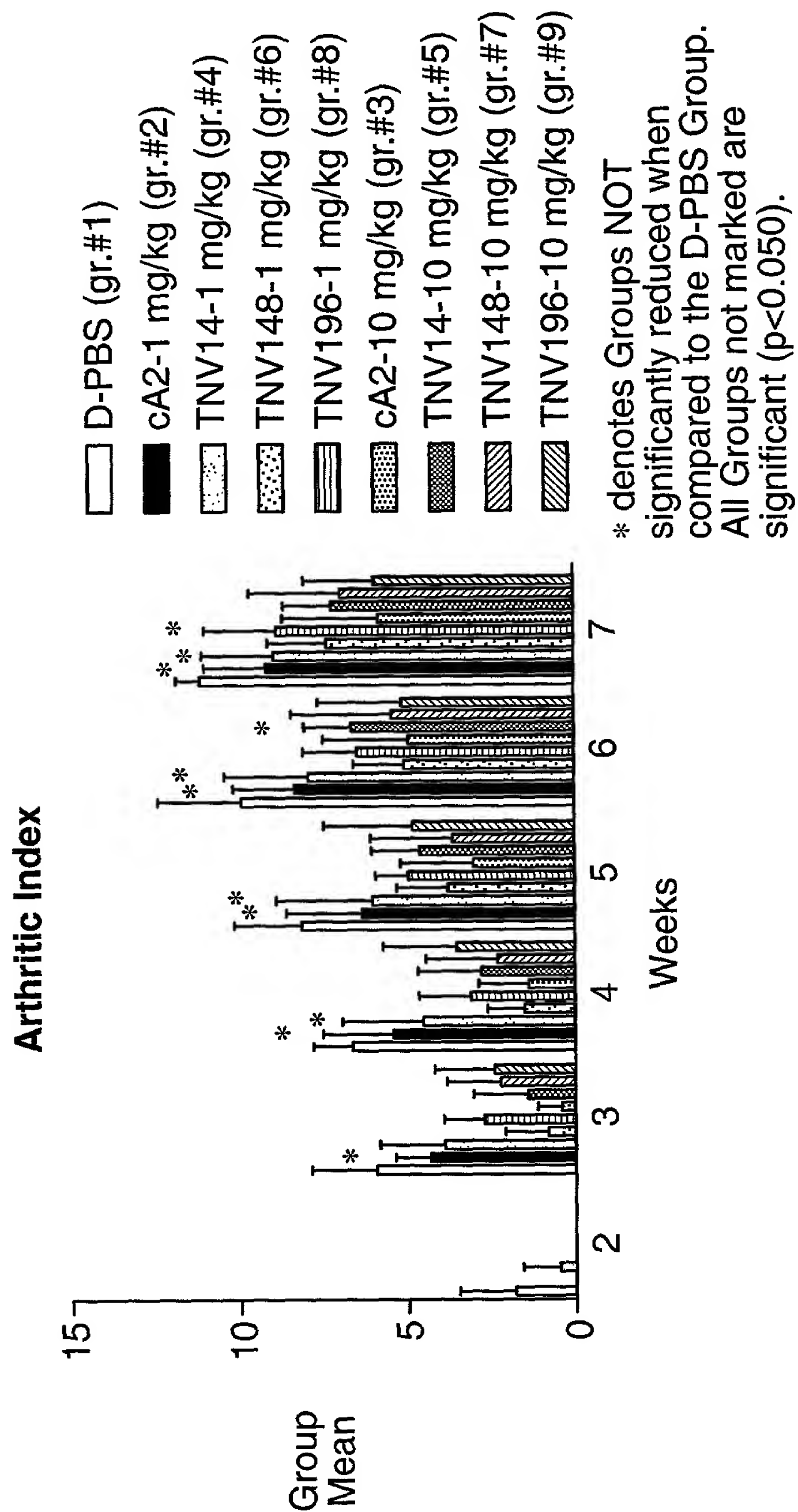
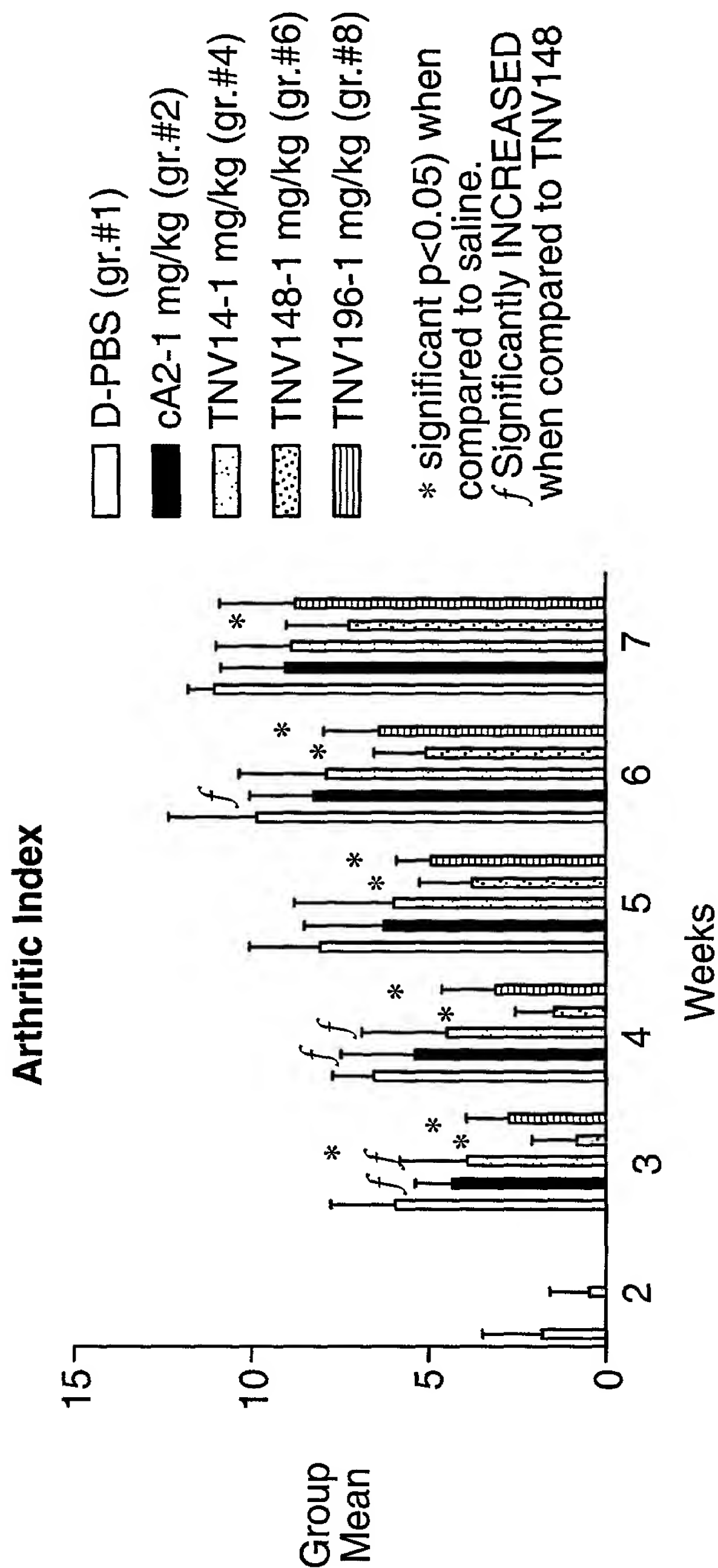


FIG. 11A



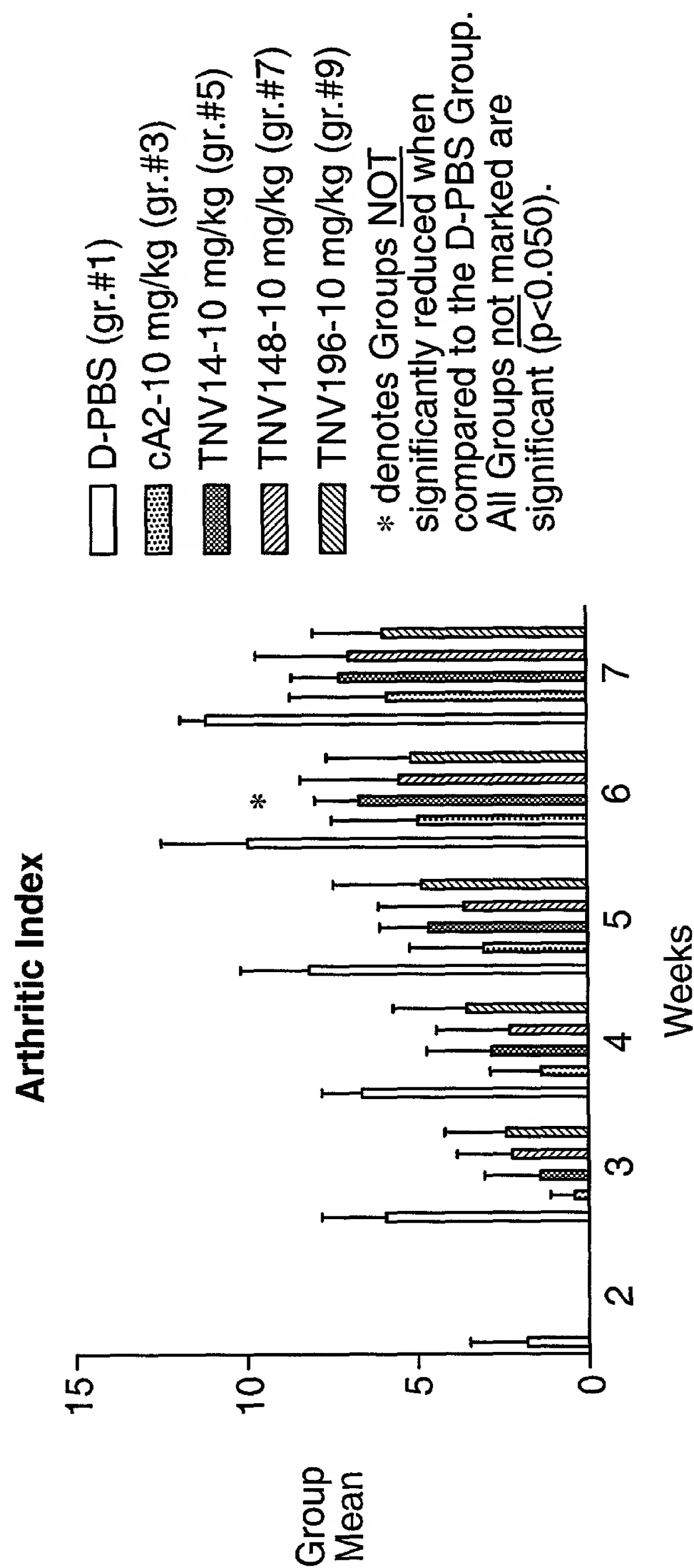
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FIG. 11B



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FIG. 11C



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FIG. 12

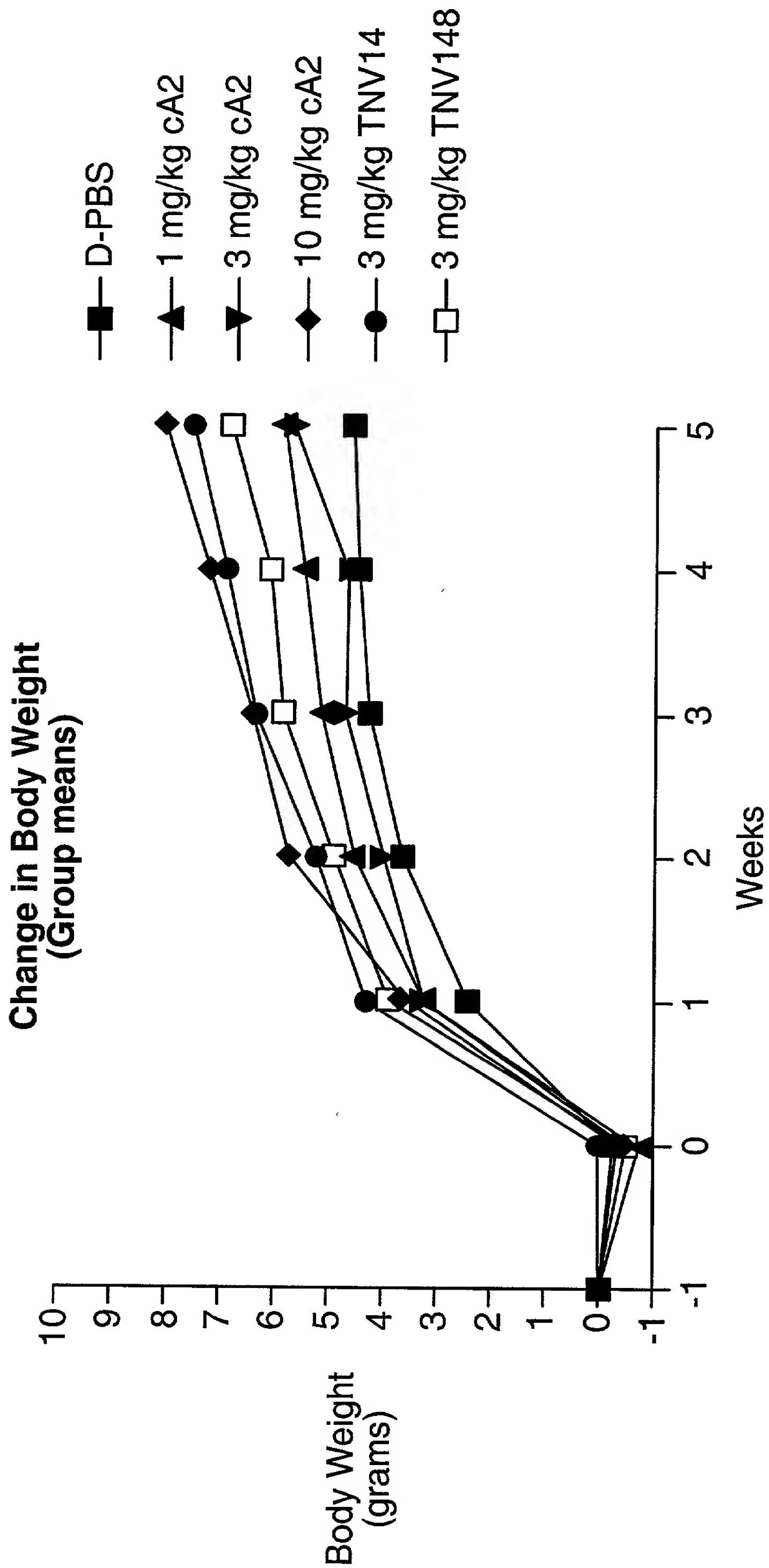
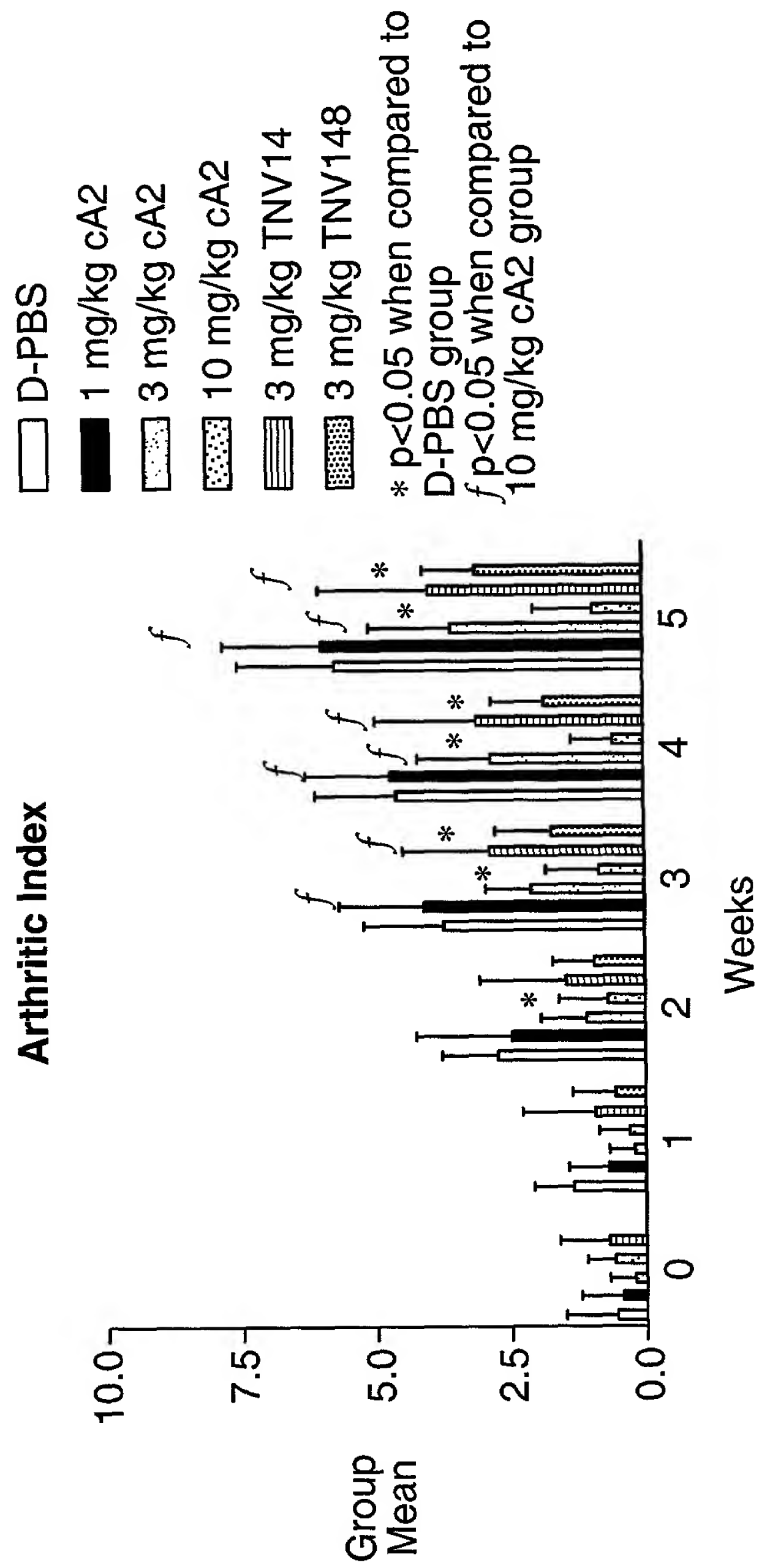
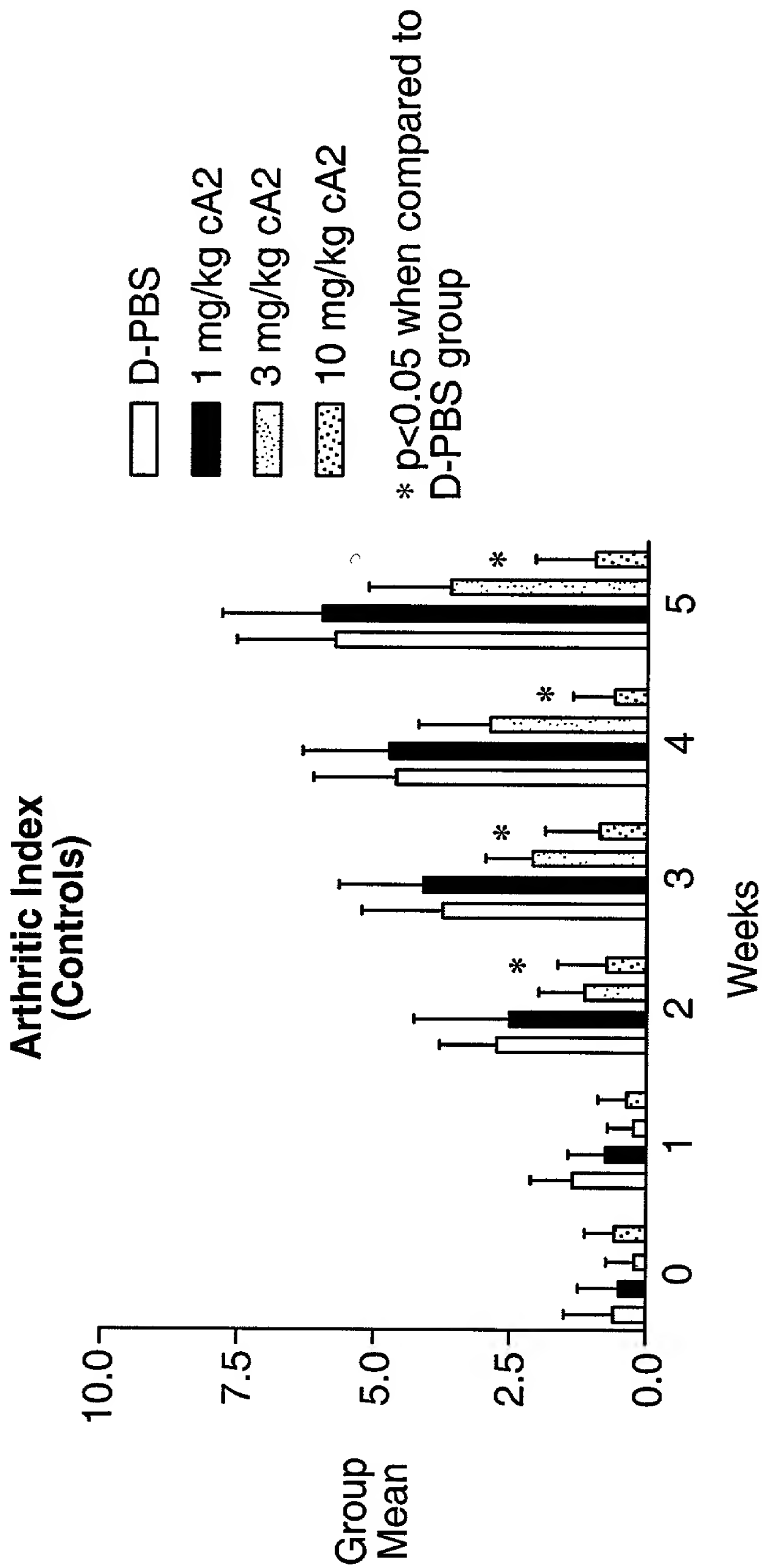


FIG. 13A



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FIG. 13B



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FIG. 13C

Arthritic Index

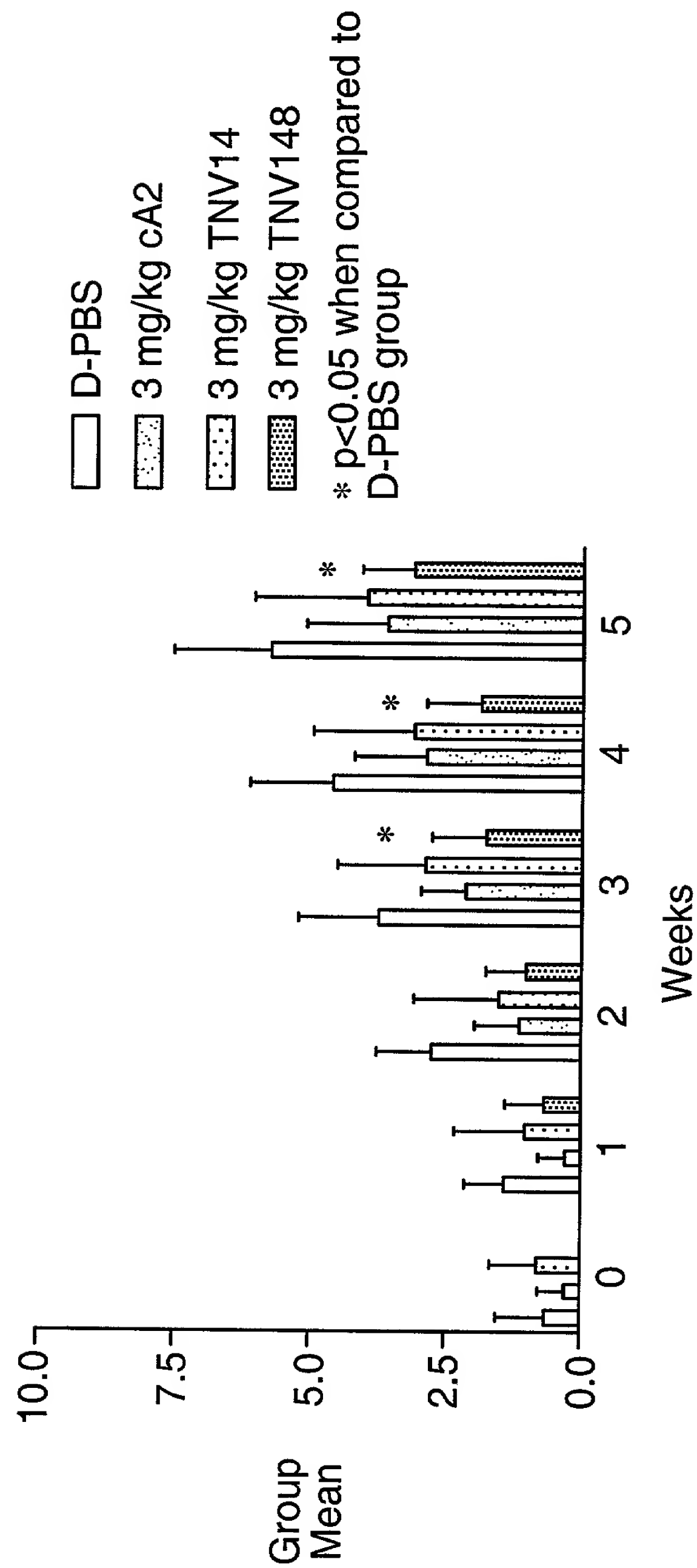
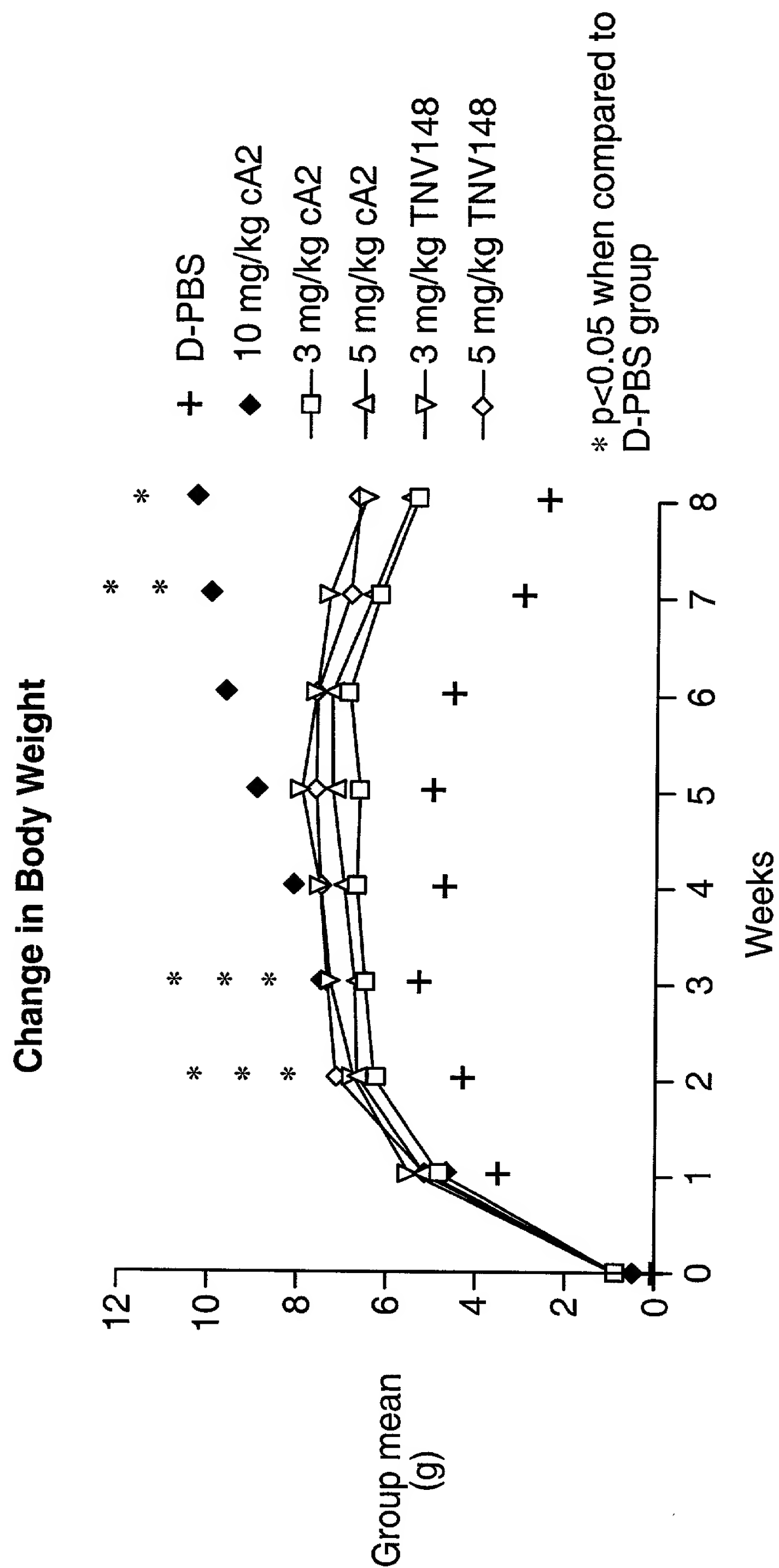
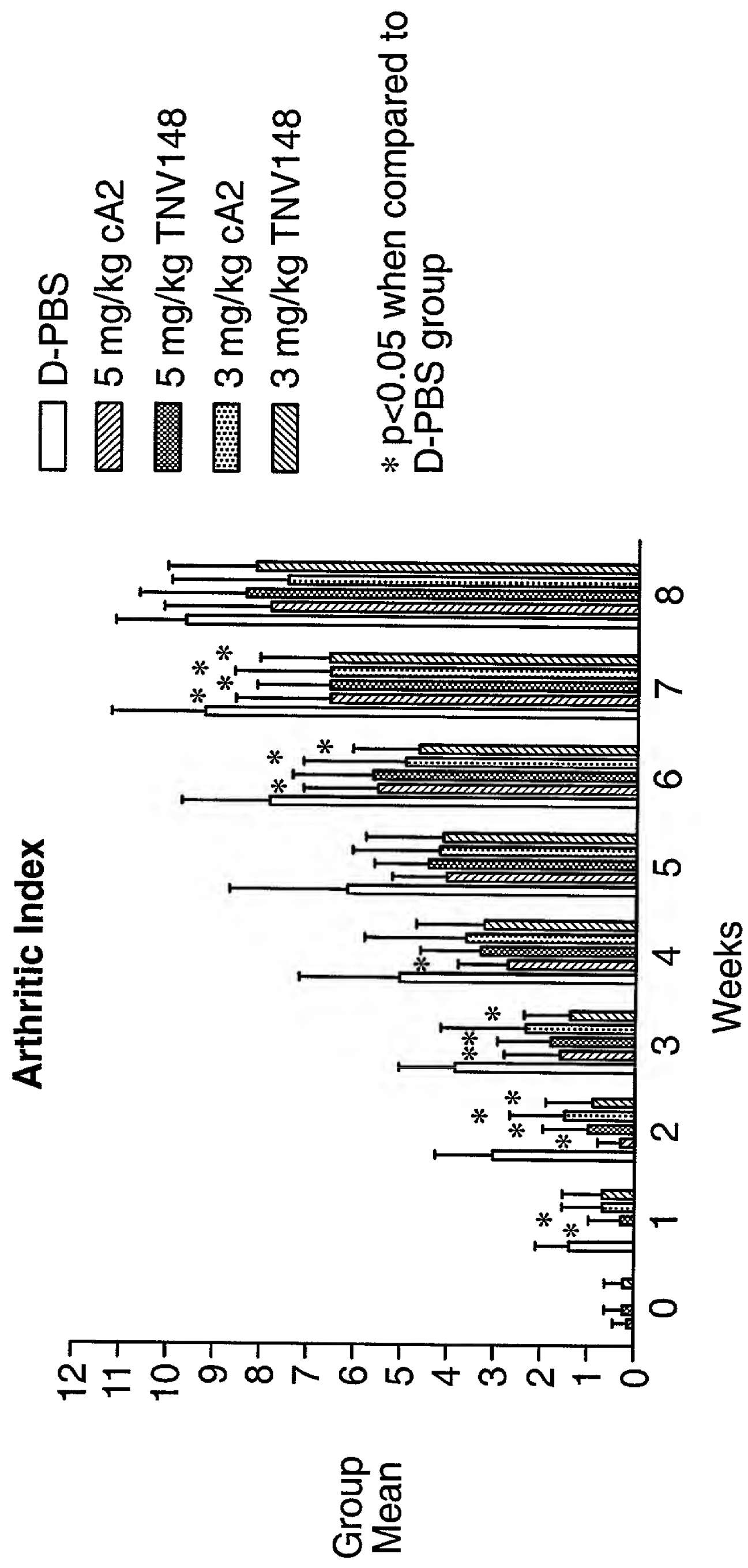


FIG. 14



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FIG. 15



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FIG. 16

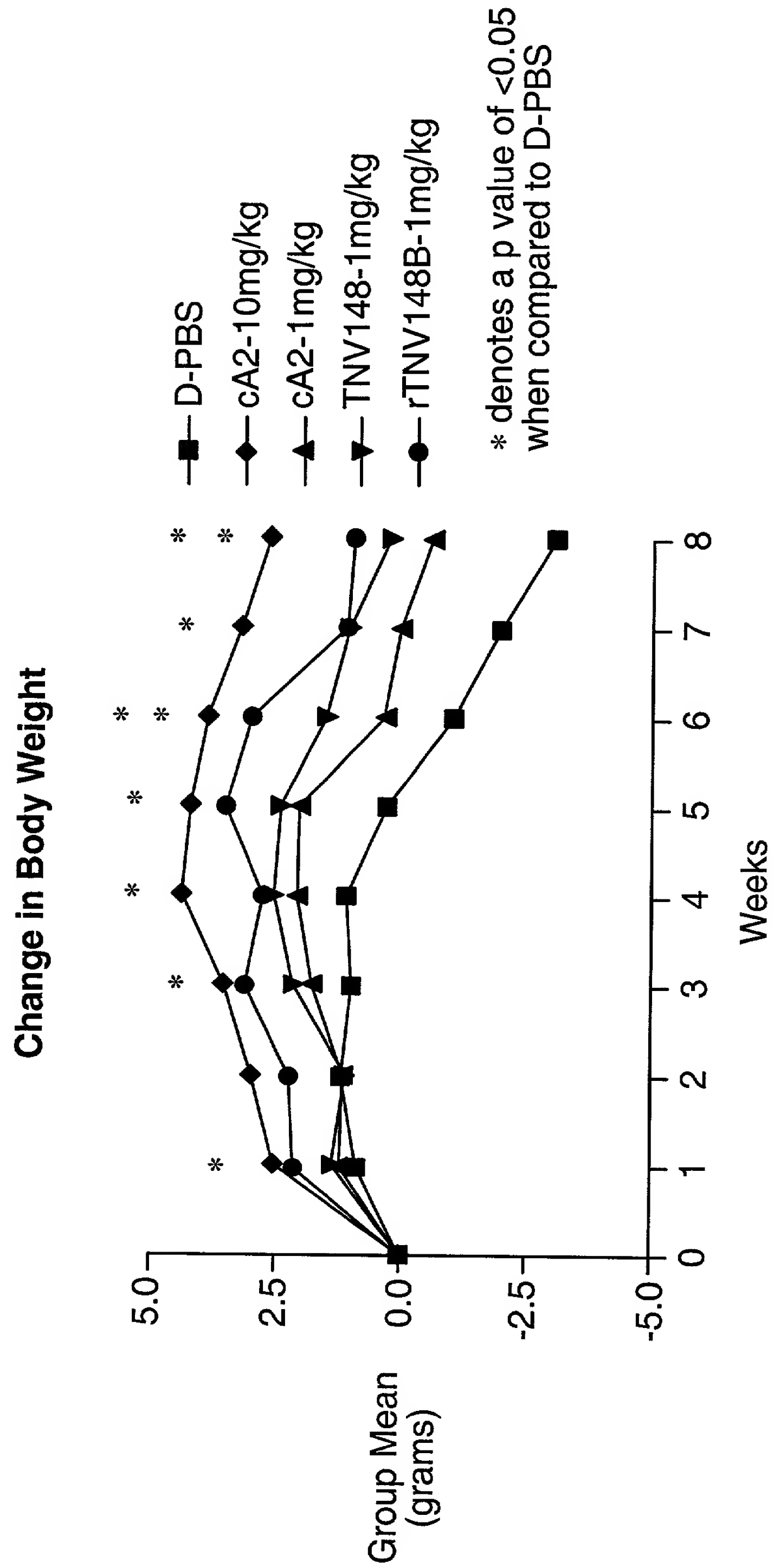


FIG. 17

Arthritic Index

